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ABSTRACT

This resource book contains mathematical games, tricks, and quick activities for the classroom. Categories include computation and calculator practice, manipulative challenges, puzzlers, picky puzzlers, patterns, measurement, money, time tricks, calendar quips, crazy computing, and riddles. Twenty-nine games, tricks, and activities are found in the computation and calculator practice section along with 6 manipulative challenges, and 37 puzzles in the two puzzler sections. The book presents 10 ideas on measurement and money, 7 pattern problems, 14 riddles, 12 time tricks and calendar quips, and 7 crazy computing activities. A key to each of the 122 activities, games, and tricks is included. (DDR)

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SCRATCH YOUR BRAIN WHERE IT ITCHES

BOOK B-1

MATH GAMES, TRICKS & QUICK ACTIVITIES

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LINDA BRUMBAUGH

CRITICAL THINKING PRESS & SOFTWARE

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Scratch Your Brain Where It Itches

B-1

Math Games, Tricks, and Quick Activities

LINDA BRUMBAUGH

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COMPUTATION/CALCULATOR PRACTICE

1. Each row of numbers contains factors and products. Search for number sentences and draw loops around those you locate.

   0 4 2 8 6 7 4 2 9 1 9 7

   6 6 5 3 0 0 9 0 9 8 7 2

   5 7 3 5 8 4 3 2 7 3 2 1

   2 2 4 5 3 1 5 4 7 2 8 1

   VARIATION: Hidden division facts

2. Divide the class into teams of up to 8 players. On "Go" the first student in each team line will race to the board and write a number. The chalk is given to the player next in line to do the same. Play continues until all but one player remains on each team. The last player on each team will race to the board and add the column of numbers written by the team. The teacher will specify: number of digits, or maybe multiples of ten, one hundred, etc.

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3. Player 1 chooses a number <10. Player 2 adds any number between 1 and 10 to the number Player 1 chose. The players take turns choosing a number between 1 and 10 and adding it to the previous sum until they reach 100. The winner forces the other player to say 100.

4. Have a student choose a secret number between 1 and 10 and perform the various operations instructed. Follow the same directions silently, but begin with zero. Finally, ask the student to subtract the initial number. You will know the final number because you performed the operations silently with zero as your original number.

NOTE: The final number varies; see solution.

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5. Students will choose a secret number between 1 and 100. Follow the directions below carefully, and you will be able to tell them what number they wind up with. Directions: Add 10 to your number. Double the sum. Add 100. Take half of the result or sum. Subtract the number you started with. The answer should be 60.

VARIATION: When computation is finished, go around the room asking each student what number they ended up with, acting surprised that more and more of them have 60. Watch their amazement! How did that happen?

6. Choose any number with more that one digit. Find the sum of the digits. Subtract the sum of the digits from the original number. Find the sum of the digits of the new number until you have a 1-digit number. What is the final number?

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7. Choose a 2-digit number with the first digit greater than the second. Reverse digits and subtract. Reverse the digits and add. What did you get?

8. Choose a number. Multiply it by 100. Subtract the original number. Add the digits. What do you get?

8

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9. Write a secret number that is greater than 3. Add 13 to that number. Multiply the sum by 6. Subtract 15 from the product. Divide the difference by 3. Subtract a number that is 4 less than the secret number. Subtract a number that is 3 more than the secret number. Divide by 2. What do you get?

10. Write any number. Multiply this number by 2. Add 3 to that product. Multiply the sum by 5. Add 13 to the product. Multiply this number by 10. Subtract tricky 280 from that product. Cross out the 2 zeros at the end of the number. What do you get?

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11. Choose a number. Add 9 to the number. Double the sum. Subtract 4. Divide the difference by 2. Subtract the original number. What do you get?

12. Write a secret number that is between 1 and 9. Multiply the secret number by 3. Then, add 2. Multiply the sum by 3. Add your secret number. You should have a number ending in 6. Cross out the 6. What do you get?

10

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13. Write a 2-digit number. Multiply this number by 3. Add 2. Multiply the sum by 3. Add your secret number. Your answer should end in 6. Cross out the 6. What do you get?

14. Write a number between 1 and 99. Multiply your number by 2. Add 35 to the product. Multiply the sum by 5. Subtract 155. Multiply the difference (missing addend) by 10. Subtract 200. Cross out the last 2 digits. What is left?

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15. Let 1 stand for January, 2 stand for February, and so forth. Write the number of your birth month. Double that number. Add 6 to the sum. Multiply the new sum by 50. Add the day of the month you were born. Subtract the number of days in a year. Say: "Tell me your answer, and I'll tell you your birthday."

16. Write the number of your birth month. Multiply by 5. Place a 3 to the right of the ones digit. Add 12. Multiply by 2. Add the day of the month you were born. Subtract 30. What do you get?

12

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17. Write a secret number. Add 6 to the number. Multiply the sum by 4. Add 7 to the new sum. Multiply that sum by 2. Subtract 62 from the product. Divide this number by 8. What is special about your answer?

18. Write your secret number. Add 5 to your number. Multiply that sum by 2. Add 9 to the product. Multiply the sum by 3. Subtract 57 from the product. Divide by 6. Is there anything significant about your answer?

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19. Write a secret number greater than 6. Add 11 to your number. Multiply that sum by 6. Subtract 3 from that product. Divide the difference by 3. Subtract a number that is 6 less than your original number. Subtract a number that is 1 more than your original number. Divide that missing addend (difference) by 2. Did you get (thrilling) 13?

20. Pick four different digits from 0–9. Arrange them to make the largest number possible. Rearrange them to make the smallest number possible. Subtract the smaller number from the larger number. Next, arrange the digits in the answer to make the largest number possible. Make the smallest number possible with these same digits. Subtract the smaller number from the larger number. Repeat the above procedures until you get the same answer twice. What answer do you get?

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21. Write your shoe size to the nearest whole number. Multiply by 2. Add 39. Multiply by 50. Subtract 1950. Add the current calendar year. Subtract the year of your birth. What's special about your answer?

22. This assumes the number of each type family member is < 10. Write the number of your brothers. Multiply by 2. Add 3. Multiply by 5. Add the number of your sisters. Multiply by 10. Add the number of grandparents you have. Subtract 150. Look at the digits in the number. How do they compare to the numbers you started with?

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23. Write your "lucky" or favorite number. It can be any number from 1 to 9. Here's how to get lots of lucky numbers. Multiply the lucky number by 9. Multiply the product of the lucky number and 9 by 12345679.

24. Write a secret number that is between 99 and 1000. Multiply the hundreds digit of the secret number by 2. Add 5. Multiply the new number by 5. Add the tens digit of the original number. Multiply the sum by 10. Add the ones digit of the secret number to the product calculated. Subtract 250 from the answer. What do you get?

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25. Write any number from 1 to 10. Double it. Add 2. Divide by 2. Subtract the initial number. What is the answer? Will you always get that answer?

26. Give a pair of probability cubes (dice) to a student. Close your eyes and turn to face away from the student. The student follows these directions: Roll the dice. Look at one of the numbers that is face up. Secretly multiply that number by 5. Add 7 to the total. Multiply that answer by 2. To that sum, add the number showing on the other die. Say the total aloud. Subtract 14 from the total. What do you get?

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27. Write your house or post office box number. Multiply it by 2. Add 5. Multiply the sum by 50. Add your age to the product. Add the number of days in a year. Subtract 615. What do you get?

28. Find the product of the following 10 numbers QUICKLY! You may use calculators or paper and pencils. As soon as you know the correct answer, write it and raise your hand, but do NOT tell anyone what you got.

$9 \times 8 \times 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1 \times 0$

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29. Construct a game board with numbered squares beginning at "start" with 99 and proceeding to zero. You will need: game markers; two number cubes, one with faces 4, 5, 6, 7, 8, 9 and the other with faces 1, 2, 3, 4, 5, 6; paper and pencils. Players must place their tokens on space 99. Players take turns: Roll the cubes. Find the sum of the two numbers. Subtract the sum from the position number. The difference indicates the square to which the player must advance. Players must state the difference aloud before moving tokens. Errors in subtraction result in loss of that turn. (Other players check their opponents' work.)

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MANIPULATIVE CHALLENGES

30. How many pennies can you arrange so that each penny touches every other penny?

31. Twelve pennies are placed in a random group on a flat surface. Two players take turns picking up the pennies. Not more than four pennies may be taken at one time by a player. The player taking the last penny could be the winner (or loser)!

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32. Arrange 6 pennies in the shape of a cross. Challenge: Move the coins and form two straight rows with 4 coins in each row.

33. Take 16 objects and put them in four rows of four. Remove 6 leaving an even number of objects in each row and in each column.

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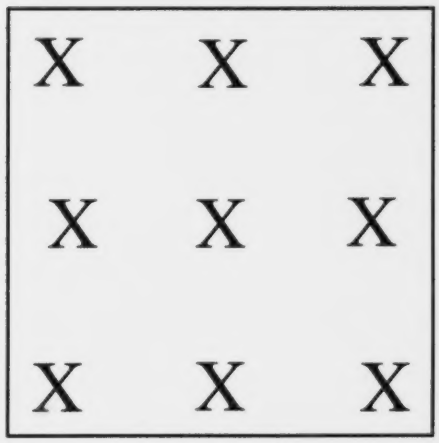
34. Divide your paper into 4 equal pieces, and I'll reward you with a quarter.

35. Separate the 9 Xs by drawing only 2 squares so that no 2 Xs are together.



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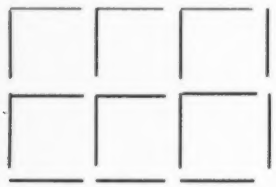
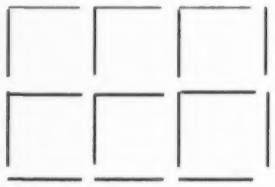
PICKY PUZZLERS

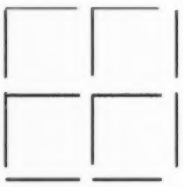
36. Use 17 toothpicks to construct this figure. Remove 5 and leave 3 squares.



37. Use 17 toothpicks to construct this figure. Remove 6 and leave 2 squares.



38. Use 12 toothpicks to construct this figure. Remove 2, leaving only 2 squares.



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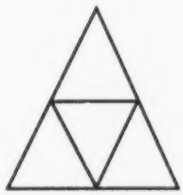
39. Use 12 toothpicks to construct this figure. Remove 2, making 3 squares the same size (congruent).

40. Make this figure with 9 toothpicks. Remove 2, leaving 3 triangles.

41. Make this figure with 9 toothpicks. Remove 2, leaving only 2 triangles.



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42. Construct this figure with 9 toothpicks. Remove 4, leaving 2 triangles.

43. Construct this figure with 9 toothpicks. Take away 6, leaving 1 triangle.

44. Use toothpicks to show that half of eleven equals six.

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45. Use 9 toothpicks to make 10 without breaking any.

46. Construct five equilateral triangles using ten toothpicks.

47. How can you remove 3 of 8 toothpicks and still have 8 remaining?

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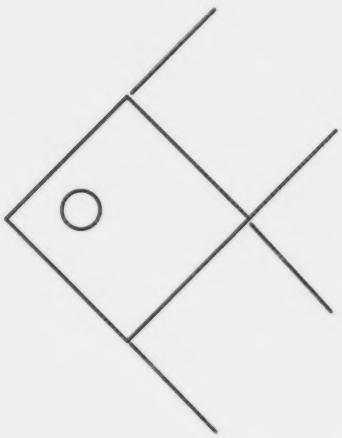
48. Use 8 toothpicks and one penny to make a fish as shown. Move 3 toothpicks and the penny to make the fish swim in the opposite direction!



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49. Look for patterns in the ones and tens places of the sums and products. Look up, and then look down.

$9 + 1 = 10$	$9 \times 1 = 9$
$9 + 2 = 11$	$9 \times 2 = 18$
$9 + 3 = 12$	$9 \times 3 = 27$
$9 + 4 = 13$	$9 \times 4 = 36$
$9 + 5 = 14$	$9 \times 5 = 45$
$9 + 6 = 15$	$9 \times 6 = 54$
$9 + 7 = 16$	$9 \times 7 = 63$
$9 + 8 = 17$	$9 \times 8 = 72$
$9 + 9 = 18$	$9 \times 9 = 81$

50. Complete the following pattern. Predict the next three lines.

$1 \times 8 + 1 = 9$

$12 \times 8 + 2 = 98$

$123 \times 8 + 3 = 987$

$1234 \times 8 + 4 = 9876$

$12345 \times 8 + 5 = 98765$

$123456 \times 8 + 6 = 987654$

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51. Continue the pattern: t, f, s, e, t, t, f, s, ____, ____.

52. Continue the pattern: O T T F F S S ____ ____ ____

53. How are these arranged? 8, 5, 4, 9, 1, 7, 6, 2, 0

54. Complete this pattern: J, F, M, A, M, J, J, A, ____, ____, ____, D

55. Find the next three letters in this sequence:
F, S, T, F, F, S, S, ____, ____, ____.

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56. There are 7 numbers that are not even. Their sum is 13. The greatest number is 7. What are they?

57. Create a problem that has the biggest answer you can think of. Don't tell what it is. Write it. I can write a bigger one!

58. How many 9s are between 1 and 100? Make a list. Look at a hundred chart.

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59. How can a raw egg drop 5 feet without breaking?

60. If there are twelve 1 cent stamps in a dozen, how many 29 cent stamps are there in a dozen?

61. Which number becomes larger when turned upside down? Can you think of any more?

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62. Can you spell just one word with these letters? UOOSWTDNERJ

63. A farmer threw 9 ears of corn in the barn. A rat came in and left with 3 ears each day. It took the rat 9 days to take all of the corn. Why?

64. The farmer has 5 daughters and each one has a brother. How many children does the farmer have?

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65. Can a farmer put his 9 ostriches in 4 pens so that there is an odd number of ostriches in each pen and so that each pen has at least one ostrich?

66. Harry had 10 pizzas and ate all but two. How many pizzas did he have left?

67. There is a line of cars with 4 cars ahead of a car, and a car in the middle. What is the fewest number of cars in line? (HINT: Draw a picture.)

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68. How much is 2 times 1/2 of 498,000?

69. Can a man living in Fairbanks, Alaska, be buried in South Carolina?

70. What kind of horse will stay wherever you put it and never needs to be fed or groomed?

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71. A knight and a bat are thrown into a dungeon together. How will the knight get out?

72. If you had only a match and entered a room containing an oil lamp, a fireplace, and a gas range, which would you light first?

73. Mo said: "I saw the most peculiar pine tree today! Every part of that tree involved the number 3! There were 3 main trunks, 3 main limbs, 3 smaller branches on each limb, and on each of those there were 3 birds and 3 acorns!" Mo quickly calculated and told his friend Jo the total number of acorns. Can you?

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74. How many pigs and ducks are in the pen? There are 17 heads and 50 feet.

75. On the way to town there are 25 trees on the right side of the road. On the way back there are 25 trees on the left side of the road. How many trees are along the road?

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76. Announce your ability to remember numbers. Ask your students to copy the group of numbers below exactly as they appear, after putting them on the chalkboard or overhead.

8	6	4	2	7	5	4
6	7	2	8	5	7	1
5	4	9	3	3	4	8
1	9	3	2	5	9	7
3	4	6	7	6	4	6
4	5	5	6	8	1	7
9	1	7	8	2	6	3

Tell the students to choose one line from the list below and erase the appropriate digit(s) from the array of numbers on the board while your back is turned. Then say that you will be able to replace these missing digits when you turn around.

Any one digit
Any two digits
Any three digits
Any one digit in each row
Any one digit in each column
Any one digit in each diagonal
All the digits in one column
All the digits in one row
All the digits in one diagonal
All the digits in one row and one diagonal
All the digits in one column and one diagonal

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77. Start with one hand and count backwards from 10, pointing to each finger one time. Add the five fingers on the other hand. How many fingers do you have?

78. A student will think of a number, and other students will take turns asking questions that may be answered with a YES or NO. For example, a student might ask, "Is it even? Is it greater than 1000? Does it contain a 4?" This continues until 20 questions have been asked. The student who guesses the number correctly will be the next one to think of a new number to guess.

79. Write the numbers 1–5 on the board and choose a student to be the wizard. (The teacher gives the wizard a number, such as 5.) The wizard leaves the room so that the rest of the class can pick the magic number. The wizard returns to the classroom and answers "yes" or "no" when the teacher points to numbers on the board. The teacher might ask, "Is it 2?" or "Is it 3?" The wizard will know the magic number when the correct number of guesses (such as 5) have been asked. The class must try to figure out how the wizard knows the magic number.

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80. If you stand on the scale with both feet and weigh 75 pounds, what will you weigh standing on the scale on only one foot?

81. If an empty barrel weighs 20 pounds, what can you put in that barrel to make it weigh less?

82. Why is a giant's hand only 11 inches long?

83. Do you know how many feet are in a yard?

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MONEY

84. If you take 5 coins from a piggy bank containing 17 coins, how many coins would you have?

85. Bozo has 2 coins in his pocket that total 15 cents. One coin is not a dime. What are his two coins?

86. Decide which is worth more—a new ten dollar bill or an old one?

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87. Jonesy gave Forty three dollars for some wood, and then sold it for $50. What was the profit?

88. How much money would you have if you had 2 female pigs and 2 male deer?

89. Ask a student to hold a dime in one hand and a penny in the other. Tell the student to multiply the value of the coin in the right hand by 8, and the value of the other coin by 5. The student is to add the results and tell you the sum. You then identify which coin is in which hand.

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TIME TRICKS

90. At what time between 7:00 and 8:00 will the hands of a clock be in a straight line?

91. Your vet gives you 3 pills for your sick dog. You are to give Rover one pill every half hour. How long will the pills last?

92. If you set your alarm for 9:00 and go to bed at 8:00, how many hours of sleep will you get?

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93. If you set your clock for 9:00 A.M. and go to bed at 8:00 P.M., how many hours of sleep will you get?

94. When does 10 + 3 = 1?

95. A runner could run 6 miles in 75 minutes when wearing Speedy Sneakers. When wearing Rapid Racers, it took the runner an hour and 15 minutes to run the same distance. How could this be true?

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CALENDAR QUIPS

96. Some months have 30 days. Some months have 31 days. How many months have 28 days?

97. How many birthdays does the average person have?

98. I'm thinking of a certain year that has occurred in this century. By interchanging the two middle digits, you will have an important date in the history of America. What are the dates? Who is associated with the second date?

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99. The student will pick any three consecutive dates on the calendar. Add these three values and tell the sum. Tell the student the center date.

100. Have a student add 4 consecutive dates from a calendar. The student tells the sum. You tell the student the 4 dates selected.

101. Have a student add 3 dates from a vertical column on a calender and divide the sum by 3, telling you the answer. You can then tell the student the three dates selected.

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102. Take the number of fingers on one hand. Multiply by the number of nickels in a quarter. Add the number of players on a baseball team. Add the number of centimeters in a meter.

103. Take the number of ounces in a pound. Divide by the sum of your eyes and ears. Multiply by the number of inches in a foot. Add the number of dimes in a dollar.

104. Take the number of oranges in a dozen. Add the number of inches in a yard. Subtract the number of months in a year. Divide by the number of quarts in a gallon.

105. Take the number of sides in a triangle. Multiply by the number of minutes in an hour. Divide by 1/2 dozen. Subtract the number of blackbirds baked in a pie. Add the number of wheels on a bicycle.

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106. Take the number of toes on both feet. Multiply by the number of babies in twins. Add the number of months in 1/2 year. Subtract the number of thumbs on 2 hands. Divide by a dozen.

107. Take the number of hours in a day. Divide by 1/2 dozen. Multiply by 2 pairs. Subtract the number of noses you have. Add the number of strikes to be "out" in baseball.

108. Take the number of ears on a dog. Multiply by the number of feet on a dog. Divide by the number of tails on a dog. Add the number of eyes on a dog.

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RIDDLES

109. Why was 6 afraid of 7?

110. What is sure to go up, but never goes down?

111. What did the alien from the Planet Metric say to the Earthling?

112. What did one math book say to another math book?

113. What do you get when a math teacher is a magician?

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114. What kind of tires do math teachers put on their cars?

115. What zoo animal do math teachers like best?

116. Which of the 50 U.S. states has the most math teachers?

117. What do geometry teachers do when they travel?

118. Where do math teachers shop?

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119. What is the favorite food of math teachers?

120. What do you get when you cross a rectangle with a rhombus?

121. What do you call a leg perpendicular to a foot?

122. Why was the right angle in the triangle smiling?

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SOLUTIONS

1. Varies

2. Varies

3. If a player says 88, the contest is really over because the largest number the other player can reach is 99. In order to guarantee reaching 88 first, 77 should be chosen. Do you see a pattern? 99, 88, 77, 66, 55, 44, 33, 22, 11

4. Varies

5. x = number

$x + 10$

$2x + 20$

$2x + 120$

$x + 60$

$x - x + 60$

6. You always get 9.

Example: 32 (chosen number)

$3 + 2 = 5$

$32 - 5 = 27$

$2 + 7 = 9$

7. The answer is always 99. Example for the number 75:

$75 - 57 = 18$

$18 + 81 = 99$

8. The answer is always 18. Example for the number 9:

$100 \times 9 = 900$

$900 - 9 = 891$

$8 + 9 + 1 = 18$

9. The answer is always 11.

10. You should have your original number. Example for the number 637:

$637 \times 2 = 1274$

$1274 + 3 = 1277$

$1277 \times 5 = 6385$

$6385 + 13 = 6398$

$6398 \times 10 = 63980$

$63980 - 280 = 63700$

11. The answer is always 7. Example for the number 136:

$136 + 9 = 145$

$145 + 145 = 290$

$290 - 4 = 286$

$286 \div 2 = 143$

$143 - 136 = 7$

12. Your secret number should be remaining. Example for the number 5:

$5 \times 3 = 15$

$15 + 2 = 17$

$17 \times 3 = 51$

$51 + 5 = 56$

13. Your secret number should be the answer. Example for the number 23:

$23 \times 3 = 69$

$69 + 2 = 71$

$71 \times 3 = 213$

$213 + 23 = 236$

cross out the 6 = 23

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14. You should see your secret number! Example for the number 42:

42 × 2 = 84

84 + 35 = 119

5 × 119 = 595

595 – 155 = 440

440 × 10 = 4400

4400 – 200 = 4200

cross out last two digits = 42

15. Add 65 to the answer and separate the digits to resemble a date. Example for December 20:

12 × 2 = 24

24 + 6 = 30

30 × 50 = 1500

1500 + 20 = 1520

1520 – 365 = 1155

Add 65: 1155 + 65 = 1220

Separate the digits: 12/20 = December 20.

16. Example for May:

5 × 5 = 25

253

253 + 12 = 265

2 × 265 = 530

530 + 21 = 551

551 – 30 = 521

The number you get shows the month and day of your birth: May 21 (5/21).

17. The answer is the same as the secret number.

18. The answer is the same as the secret number.

19. The answer is always 13.

20. The answer is always 6174. Example:

4321 – 1234 = 3087

8730 – 0378 = 8352

8532 – 2358 = 6174

21. The digits in the number are your shoe size and the age you will turn in the current year.

22. 1st digit = number of brothers

2nd digit = number of sisters

3rd digit = number of grandparents

23. Example: Lucky Number = 8

8 × 9 = 72

12345679 × 72 = 888888888

24. The answer is the secret number. Example for number 701:

7 × 2 = 14

14 + 5 = 19

19 × 5 = 95

95 + 0 = 95

10 × 95 = 950

1 + 950 = 951

951 – 250 = 701

25. The answer is always 1.

26. The digits will be the "face up" numbers on the probability cubes.

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27. You will see your house number followed by your age.

Example for 618 and 10 years old:

$2 \times 618 = 1236$

$1236 + 5 = 1241$

$1241 \times 50 = 6250$

$6250 + 10 = 6260$

$6260 + 365 = 62425$

$62425 - 615 = 61810$

618/10

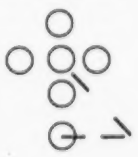
28. The answer is 0. You might consider interchanging the zero with one of the other digits in the problem.

29. Winners must pass the 15th square. For example, starting at 99, the player rolls 7 and 4, finds the sum (11), subtracts the sum from the number in the square (99 – 11), and moves to the square containing that number (88).

30. Three if limited to a plane; 4 if stacked one on top of 3.

31. The person whose turn it is when 5 pennies are left is the loser (or winner); the person whose turn it is when there are 10 pennies left is the loser (or winner).

32. Put the coin from the lower end of the cross on top of the center coin.



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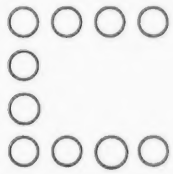
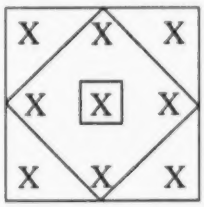


34. Give one of the 1/4s as the quarter!

35.



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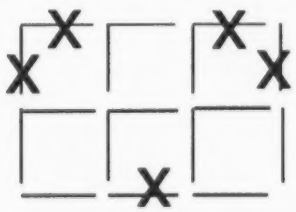

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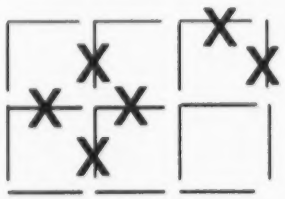

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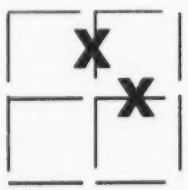

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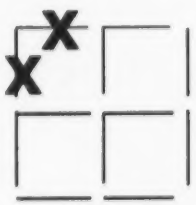

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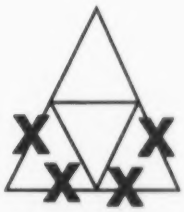
40.

41.

42.



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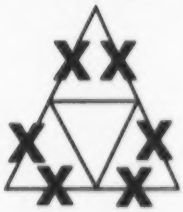


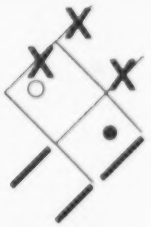
44. Roman Numeral XI with the bottom part covered (VI).

45.

46.

47.

48.



49. Digits increase by one. Ones digit is one less than the number added. OR Sum of digits in each product is 9. In each column of the products, 1 through 9 appears.

50. $1234567 \times 8 + 7 = 9876543$

$12345678 \times 8 + 8 = 98765432$

$123456789 \times 8 + 9 = 987654321$

51. Two, four, six, eight, ten, twelve, fourteen, sixteen, eighteen, twenty

52. One, two, three, four, five, six, seven, eight, nine, ten

53. Alphabetically

54. Months of the year: September, October, November

55. Eighth, ninth, tenth

56. 7, 1, 1, 1, 1, 1, 1

57. Write "A BIGGER ONE."

58. 19: 9, 19, 29, 39, 49, 59, 69, 79, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99

59. If it is dropped from a height greater than 5 feet, it will fall 5 feet without breaking, but after that, it'll probably break when it hits the ground!

60. 12

61. 6 becomes 9

69 becomes 96

106 becomes 109

54

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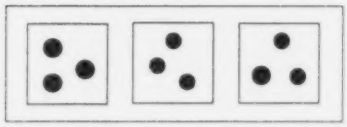
62. JUST ONE WORD

63. The rat took its own 2 ears and 1 ear of corn each time it left the barn. If the rat carried only 1 ear of corn per day, it would take 9 days to remove the corn from the barn.

64. 6

65. Three small pens are inside a larger pen. The larger pen has 9 ostriches and the 3 smaller pens each contain 3 ostriches.



66. 2

67. 5

68. 498,000 × 2 × 1/2 = 1.

69. Not if he is living!

70. Sawhorse

71. 3 strikes of the bat and he is out

72. The match

73. 0. Pine trees don't have acorns.

74. 8 pigs, 9 ducks

75. 25. The trees on the right side when going to town were the same trees on the left side when returning.

76. The sum of the digits in each row, column, and diagonal is 36! A missing figure can be found by adding the digits that remain in a row, column, or diagonal and subtracting the sum from 36. The difference is the missing digit.

77. 11: 10, 9, 8, 7, 6 and 6 + 5 = 11

78. Varies

79. The wizard must keep track of the NUMBER OF TIMES the teacher points to numbers on the board. When the total choices pointed to equals the number that is being asked, the wizard will know that is the magic number. When someone has an idea as to HOW it's done, let that student test the theory twice. (It may be luck.) Don't give the secret away if they don't figure it out. Play it another time.

80. 75 pounds

81. Put holes in the barrel. That way you have removed some of the material and it weighs less.

82. One more inch and it would be a foot!

83. It depends upon how many people are standing in the yard.

84. The 5 you took.

85. A dime and a nickel. One coin is not a dime, but the other one is!

86. The new ten dollar bill is worth 9 dollars more than the old ONE.

87. The profit was $47. The sellers' names were Forty and Jonesy.

88. Two sows n' bucks

89. One coin must be multiplied by an even number and the other coin must be multiplied by an odd number. If the student tells you an even number, the right hand holds the penny. If odd, it holds the dime.

90. A geared clock helps. About 7:06.

91. 1 hour. Rover gets one now, one in 30 minutes, and the last pill 30 minutes after that.

92. 1 hour: 8 P.M. to 9 P.M.

93. 13 hours

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94. Three hours AFTER 10:00 is 1:00.

95. The shoes have nothing to do with it; 75 minutes is an hour and 15 minutes.

96. All of them!

97. One—just like any other person!

98. 1942, 1492, Christopher Columbus

99. Divide the sum by 3 and the result will always be the center date! If x is the center date, the three dates are $x - 1$, x, and $x + 1$. Adding the three dates gives a sum of $3x$. Dividing by 3 gives x. Subtract 1 to find the first date. Add 1 to find the last date.

100. Divide the sum by 4. Ignore any remainder. The answer is the second date in the list.

101. The result will be the center date. Subtract 7 from the result to get the 1st date and add 7 to the result to get the third.

102. $5 \times 5 + 9 + 100 = 134$

103. $(16 + 4) \times 12 + 10 = 58$

104. $(12 + 36 - 12) \div 4 = 9$

105. $(3 \times 60) \div 6 - 24 + 2 = 8$

106. $(10 \times 2 + 6 - 2) \div 12 = 2$

107. $(24/6) \times 4 - 1 + 3 = 18$

108. $((2 \times 4) \div 1) + 2 = 10$

109. Because seven eight (ate) nine

110. Your age

111. Take me to your liter.

112. I've got problems!

113. Tricky problems

114. Multi-ply tires

115. The graph (giraffe)

116. Math-a-chusetts

117. Catch planes

118. At deci-malls

119. Math-potatoes!

120. Rect-bus (wrecked bus)! Also, a rectangle that is a rhombus is a square.

121. Right ankle!

122. It was beside (a)cute angle!

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